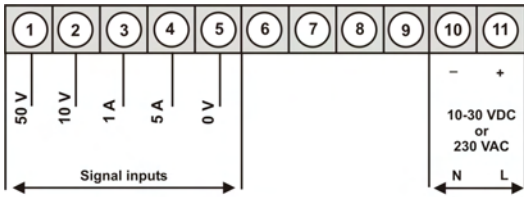




**M2 – 5-digit digital panel meter in 96x48 mm (BxH)
AC voltage / AC current signals rms-value (TRMS)
50 VAC, 10 VAC, 1 AAC, 5 AAC**

- red display of -19999...99999 digits (optional green, orange, blue or tricolour display)
- compact installation depth: 70 mm without plug-in terminal
- adjustment via factory default or directly on the sensor signal
- min-/max-memory with adjustable permanent display
- 30 additional adjustable supporting points
- display flashing at threshold value exceedance/undercut
- zero key for actuation of tara- /hold-function, display change, setpoint setting, alarm actuator
- flexible alarm system with adjustable delay times
- power measurement and energy measurement at constant voltage
- mathematical functions like reciprocal value, square root, squaring and rounding
- constant setting / respectively setpoint setting
- sliding averaging
- brightness control via parameters or front keys
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 2 relay outputs
- optional: 1 independently scalable analog output
- optional: galv. insulated digital input for the triggering of Tara, Hold, display change
- accessories: pc-based configuration-kit PM-TOOL with CD & USB adapter
- on demand: devices for working temperatures of -20°C...60°C or -40°C...70°C

• AC voltage, alternating current (true RMS)



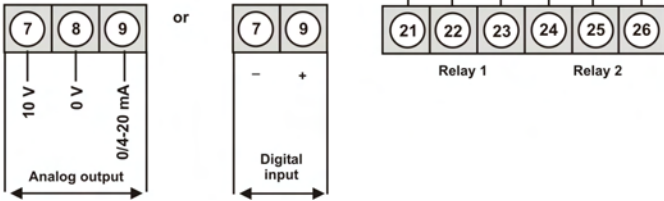
Supply 230 VAC

M2-1VR5B.0004.570CD

Supply 10-30 VDC

M2-1VR5B.0004.670CD

Options:



• Product key options

M	2-	1	V	R	5	B.	0	0	0	4.	5	7	0	C	D
M	2-	1	V	R	5	B.	0	0	0	4.	6	7	0	C	D

EUR

2	2 relay outputs
1	Without keypad, operation on the back
4	Voltage supply 115 VAC
X	Analog output 0/4-20 mA, 0-10 VDC with 230 VAC Analog output 0/4-20 mA, 0-10 VDC with 10-30 VDC
I	Digital input galv. insulated
B	Blue
G	Green
Y	Orange
T	Tricolour (Red-Green-Orange)*

*For devices with 230 VAC voltage supply, only one option is available: relay outputs or analog output.

Please state physical unit on demand, e.g. V.

• Parameterisation software

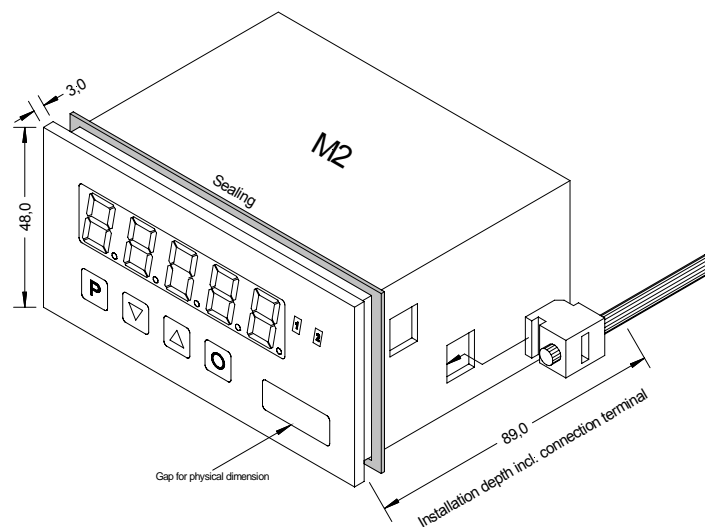
PC based configuration software PM-Tool for devices without keypad, for a simple adjustment of standard devices, incl. CD & USB-adapter. Programming is made via an interface on the back.

PM-TOOL-MUSB4

• Technical data

Dimension	Housing	B96 x H48 x D70 mm (including plug-in terminal D= 89 mm)			
	Panel cut-out	92.0 ^{+0.8} x 45.0 ^{+0.6} mm			
	Fixing	screw elements for insulation thickness up to 3 mm			
	Housing material	PC Polycarbonate, black			
	Sealing material	EPDM, 65 Shore, black			
	Protection class	at the front IP65 standard, back side IP00			
	Weight	approx. 250 g			
	Connection	plug-in terminal; line cross-section up to 2.5 mm ²			
Display	Display	5-digit			
	Digit height	14 mm			
	Segment colour	red (standard), optional available in green, blue, orange or tricolour (red/green/orange)			
	Display range	-19999 to 99999			
	Setpoints	optical display flashing			
	Overflow	horizontal bars at the top			
	Underflow	horizontal bars at the bottom			
	Display time	0.1 to 10.0 seconds			
Measuring input	Measuring range	50 VAC	/ 10 VAC	/ 5 AAC	/ 1 AAC
	Input resistance	Ri at ~200 kΩ	/ Ri at ~40 kΩ	/ Ri at ~0.05 Ω	/ Ri at ~200 Ω
	Measuring fault	0.5% of measuring range at 50 Hz...1 kHz up to crestfactor 4 for input signals of 1...100% of final value			
	Temperature drift	100 ppm/K			
	Measuring time	0.1 ... 10.0 seconds			
	Measuring principle	U/F-conversion			
	Resolution	approx. 18 Bit at 1 second measuring time			
	Output	Relay	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC		
Switching cycle		30 * 10 ³ at 5 AAC, 5 ADC ohm resistive burden 10 * 10 ⁶ mechanically Separation in accordance with DIN EN 50178 / Specifications in accordance with DIN EN 60255			
Analog output		0-10 VDC/ burden ≥ 10 kΩ, 0/4-20 mA burden ≤ 500 Ω, 16 Bit			
Digital input	Input galv. insulated	< 2.4 OFF; > 10 V ON; max. 30 VDC, Ri at ~ 5 kΩ			
Power pack	Supply	230 VAC 50/60 Hz ± 10 % (max. 10 VA) 10-30 VDC, galvanic insulated (max. 4 VA)			
	Memory	EEPROM	Data life ≥ 100 years at 25°C		
Ambient conditions	Working temperature	0 to + 60 °C			
	Storing temperature	-20 to + 80 °C			
	Climatic density	relative humidity 0-85% on years average without dew			
CE-sign	Conformity to directive 2004/108/EG				
EMV	EN 61326, EN 55011				
Safety standard	According to low voltage directive 2006/95/EG; EN 61010; EN 60664-1				

Housing:



• Order key

	M	2-	1	V	R	5	B.	0	0	0	4.	6	7	0	C	D	
Basic type M-Line																	Dimension
Installation depth 89 mm (incl. plug-in terminal)																	<input type="checkbox"/> D physical unit
Housing size 96x48x70 mm (BxHxD)																	Version
Display type V, A																	<input type="checkbox"/> C C
Display colours Blue Green Red Red/Green/Orange Orange																	Switching points
Number of digits 5-digit																	<input type="checkbox"/> 0 no switching point <input type="checkbox"/> 2 2 relay outputs
Digit height 14 mm																	Protection class
Digital input without 1x digital input																	<input type="checkbox"/> 1 without keypad, operation on the back <input type="checkbox"/> 7 IP65 / plug-in terminal
																	Supply voltage
																	<input type="checkbox"/> 4 115 VAC <input type="checkbox"/> 5 230 VAC <input type="checkbox"/> 6 10-30 VDC galv. insulated
																	Measuring input
																	<input type="checkbox"/> 4 AC voltage / AC current
																	Analog output
																	<input type="checkbox"/> 0 without <input type="checkbox"/> X 0-10 VDC, 0/4-20 mA
																	Sensor supply
																	<input type="checkbox"/> 0 without